

CLAIMS

What is claimed is:

1. A multi-point conferencing apparatus for conducting a conference with a plurality of remote conference endpoints linked for communication by a network, the apparatus comprising:
 - a multi-point conference application for receiving audio and video signals from the plurality of remote conference endpoints, processing the received audio and video signals, combining the processed audio and video signals with the local audio and video signals, and transmitting the combined audio and video signals to each of the plurality of remote conference endpoints, the multi-point conference application being configured to create a plurality of processing trains corresponding to the plurality of remote conference endpoints, each processing train processing audio and video signals from a selected one of the remote conference endpoints.

1 2. The apparatus of claim 1, wherein the multi-point
2 conference application comprises a circuit switch for
3 instantiating the plurality of processing trains, the
4 circuit switch including dynamically allocable inverse
5 multiplexers.

1 3. The apparatus of claim 1, wherein the multi-point
2 conference application includes a video switching module
3 for combining the remote and local video signals, and an
4 audio mixer for combining the remote and local audio
5 signals, the video switching module and audio mixer
6 directing the combined signals as input to each of the
7 processing trains.

1 4. The apparatus of claim 3, wherein the video switching
2 module is selectively operable in a continuous presence
3 mode, wherein images corresponding to each of the plurality
4 of conference endpoints are displayed in separate areas of
5 a composite image.

1 5. The apparatus of claim 1, further comprising a
2 plurality of ISDN ports, each coupleable to an ISDN line,
3 for receiving and transmitting audio and video signals from
4 and to the conference endpoints over the network, each
5 conference endpoint having at least one of the plurality of
6 ISDN ports corresponding thereto.

1 6. The apparatus of claim 1, wherein each of the
2 plurality of processing trains comprises a communication
3 process and a set of codecs.

1 7. The apparatus of claim 6, wherein the communication
2 process comprises an H.320 communication process.

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1 8. A method for conducting a conference between a near
2 conference endpoint and a plurality of remote conference
3 endpoints connected for communication by a network,
4 comprising the steps of:
5 at the near conference endpoint:
6 generating local audio and video signals;
7 receiving audio and video signals from the plurality
8 of remote conference endpoints;
9 creating a plurality of processing trains for
10 processing the received signals, each processing train
11 uniquely corresponding to one of the plurality of remote
12 conference endpoints;
13 processing the received audio and video signals;
14 combining the processed audio and video signals with
15 the local audio and video signals; and
16 transmitting the combined audio and video signals to
17 each of the plurality of remote conference endpoints.

18 9. The method of claim 8, wherein the step of creating a
19 plurality of processing trains includes creating a
20 communication process and a set of codecs.

1 10. The method of claim 8, wherein the step of combining
2 the processed audio and video signals is performed using an
3 audio mixer and a video switching module.

4 11. The method of claim 8 further comprising providing a
5 circuit switch for instantiating the plurality of
6 processing trains, the circuit switch including dynamically
7 allocable inverse multiplexers.

8 12. The method of claim 10, wherein the video switching
9 module is selectively operable in a continuous presence
10 mode, wherein images corresponding to each of the plurality
11 of conference endpoints are displayed in separate areas of
12 a composite image.